

Remarks

In the Office Action dated July 29, 2010 the Examiner rejected claims 1-20 under 35 U.S.C. § 112 second paragraph. The Examiner rejected claims 7-20 under 35 U.S.C. § 102 as being anticipated by the U.S. patent to Schwesinger et al. 5,904,424. The Examiner rejected claims 1-6 under 35 U.S.C. § 103 as being anticipated by the U.S. patent to Schwesinger et al.

By this Amendment, Applicants' attorney cancelled all the pending claims and has inserted therefor new claims 21-24 to more particularly point out and distinctly claim what Applicants regard as their invention. In particular, each of the independent claims includes a plurality of separate microfluidic elements including at least one mobius-like element connected to an inlet channel to helically rotate a first fluid stream relative to a second fluid stream and wherein a relative degree of rotation is greater than $\pi/2$ and less than 2π to fold the fluid streams. The microfluidic elements define a fluidic, flow-folding, mobius-like, topologic structure. Support for these features can be found at least at the Abstract and paragraphs [0052], [0053], [0054], [0064], [0065] and [0066] of the corresponding published U.S. application 2007/0177458.

Clearly, these features are neither taught, disclosed nor discussed by any of the references of record, taken either alone or in combination with one another. For example, the U.S. patent to Schwesinger et al. discloses a confluence element connected by a connection to microchannels wherein the connection effects a 90° rotation of the inflow of the liquid relative to a branching plane as the liquid flows from the micro channels to the confluence element.

This is to be contrasted with the features of the new independent claims wherein at least one mobius-like element is connected to an inlet channel to helically rotate a first fluid stream relative to a second fluid stream wherein the relative degree of rotation is greater than $\pi/2$ and less than 2π . The microfluidic elements define a fluidic, flow-folding mobius-like topologic structure.

Consequently, in view of the above, and in the absence of better art, Applicants' Attorney respectfully submits the application is in condition for allowance, which allowance is respectfully requested.

Please charge any fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,
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